

7. The system according to claim 1 wherein the transmitter is adapted for transmitting both power and data to a receiver adapted for receiving both power and data.

8. The system according to claim 1 adapted for bidirectional exchange of data.

9. The system according to claim 1 wherein the transmitter comprises one of a power converter, or an energy storage device charger.

10. The system according to claim 1 wherein the receiver comprises one of a computer device, a communication device, an imaging device, a display device, an energy storage device, or a peripheral device.

11. A data transmission method comprising the steps of: wirelessly transmitting a data signal from a transmitting inductor to a receiving inductor;

identifying the presence of data error in the data signal; and performing one or more error correction algorithm for improving the data signal.

12. The method according to claim 11 further comprising the step of wirelessly transmitting a power signal from the transmitting inductor to the receiving inductor.

13. The method according to claim 11 further comprising using the data signal to transfer information about the power signal.

14. The method according to claim 11 further comprising alternating the transmission of a data signal with the transmission of a power signal.

15. The method according to claim 11 wherein the transmitting and receiving steps are bidirectional.

16. The method according to claim 11 wherein identifying the presence of data error in the data signal further comprises comparing the data signal to an inverted data signal.

17. The method according to claim 11 wherein the receiving step further comprises oversampling the data signal.

18. The method according to claim 11 wherein the receiving step further comprises oversampling the data signal, and wherein the performing one or more error correction algorithm for improving the data signal comprises shifting the sampling window.

19. The method according to claim 11 wherein the receiving step further comprises oversampling the data signal, and wherein the performing one or more error correction algorithm for improving the data signal comprises changing the size of the sampling window.

20. The method according to claim 11 wherein the receiving step further comprises oversampling the data signal, and wherein the performing one or more error correction algorithm for improving the data signal comprises changing the number of sampling points.

21. The method according to claim 11 wherein the receiving step further comprises oversampling the data signal, and wherein the performing one or more error correction algorithm for improving the data signal comprises changing the transmission power.

22. The method according to claim 11 wherein the receiving step further comprises oversampling the data signal, and wherein the performing one or more error correction algorithm for improving the data signal comprises changing the transmission frequency.

23. The method according to claim 11 further comprising the step of dynamically tuning at least one of the transmitter and receiver for optimizing the data signal.

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